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 ... com retailers or shipments made in less-than-**case** quantities from a ... general, such systems are used in order-**packing** systems where the same **item** is needed ...
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 ... We convert the scheduling problem into the problem of bin **packing** with **item** fragmentation, which we ... Each **item** may be fragmented in which **case** overhead units ...
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 ... Cartoning (0) **Case** Forming (1) **Case Packing** (0) Cleaning ... Range Combo, Checkweighers
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 ... is often implemented by **packing** each **item** using one ... overall, WOLFPACK out-performed current BICC **packing** methods using ... required in all but one **case** where the ...
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FDA/CFSAN A Food Labeling Guide: Chapter III--Net Quantity of ...

... of contents) is placed as a distinct **item** in the ... of the upper **case** letters when only upper **case** letters are ... In some cases where the **packing** medium is normally ...
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Main Menu Setup Info Purchase Order

... IE "Customer Copy", "Office Copy", "**Packing Slip**" etc.) You can print: one invoice, all unprinted invoices, one ... Serialized, **item** picture, **case** pack buy ...
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Real Life Examples Of Affordable Order Fulfillment

... we charge the same \$.30 for an opened **case** as we ... is \$2.00 per order plus \$.30 per **item** plus \$.30 ... mail-merge printed invoices instead of just **packing** lists and ...
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Data On Activities Examined, Physical Processing and Preservation ...

... Process tux cases, SA, 8-10 min./ **case**, 134 cases ... completed work, SA, LT1, LT2, <1 min./ **item**, 88035 items ... Pack shipments, prepare letters, create **packing** slips, GA, 3 ...
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... a single WID per container a Container **Packing** List (CPL ... description that there is only one waste **item** in the ... in rare instances will this not be the **case** due to ...
ntser3.cad.ornl.gov/wmdireccerf/Documents/Logsheets/Instructions%20for%20LogSheet.RAD.pdf - [Similar pages](#)

ILL-Fated Books

... Plastic tote no **packing**, \$20.00, 200, \$.10, \$100, Low. ... doubt in my mind that this mailing **case** is an excellent container for single **item** shipping, particularly ...
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... and Weight of **Packing** Box (3) **Packing** Condition Safety and ... This **case** remains even when an adapter is used. ... (3) Impact Drive condition Test **item** Test Condition ...
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... 0dB 20kHz LPF ON (9) Acoustic Noise **Item** Spec. ... Weight / **Packing** (2) Dimensions and Weight of **Packing** Box (10pcs ... This **case** remains even when an adapter is used. ...
www.pioneerelectronics.com/pio/pe/images/portal/cit_3424/2000831DVD120SProductSpec.pdf - [Similar pages](#)

Features **Item** : Living in a world beyond OSHA

... shipping errors because of a simplified **packing** process." Finally ... 70 percent below the industry **average** over the ... **Case** Study Measuring performance You won't find ...
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... put away, storing, retrieving, order picking, **packing** and shipping ... or pieces to mean an individual unit of an **item**. ... as broken **case** or full **case** and subsequently ...
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[PDF] presented to: Warehouse and Distribution Science Prof.

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... sense of security Missing data fields Incomplete **Item** Master (example ... capacities are necessary in receiving, replenishment, picking, **packing**, shipping ... **Case** Study ...
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Some unexpected expected behavior results for bin packing

... 1980. 15 GS LUEKER, "An **average-case** analysis of bin **packing** with uniformly distributed **item** sizes," Report No. 181 ...

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... within the de minimis levels in the **case** of trade ... Tea overtook coffee as the largest export **item** in 1989 ... In addition, the **packing** and distribution of tea was ...

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SIAM Journal on Discrete Mathematics, Volume 13

... W. Shor, Richard R. Weber, Mihalis Yannakakis: Bin **Packing** with Discrete **Item** Sizes, Part I: Perfect **Packing** Theorems and the **Average Case** Behavior of ...

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... Bin **packing** with discrete **item** sizes, part II ... Yannakakis: Fundamental Discrepancies between **Average-Case** Analyses under ... Distributions: A Bin **Packing Case** Study. ...

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Dutch Oven Newsletter from CeeDubs.com VOLUME II NUMBER 2 JANUARY ...

... In my **case** my catacraft is rigged to be the 'kitchen ... **Packing** two aluminum DO's in lieu of two cast iron ... are now being classified as a "specialty **item**" that are ...

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[PDF] Genetic Algorithms for the Multiple Container Packing Problem

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... can be divided into two strongly depending parts which must be solved simultaneously:

(a) Select items for **packing**, and (b ... In this **case**, the **item** is moved ...

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... a new on-line heuristic for one-dimensional bin **packing** whose **average-case** behavior is ... distributions, ie, ones in which the set of possible **item** sizes is ...

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Manufacturing Solutions by Epicor: Case Studies

Case Studies. Case Studies. ... view their pick order, then scan the lot and **item** number from ... Summa Tech is also looking at the Avanté Advanced **Packing** and Tracking ...

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... 125A Page -3- 9. **Item** Pricing Information 9.A. Library ... \$30.60 Hour 17 Per box price for **packing** on customer ... binding, made to size: a. With **case** (cloth buckram ...

www.doa.state.nc.us/PandC/125a.pdf - [Similar pages](#)

125A - Binding, Library and Textbook

... 9. **Item** Pricing Information. ... Hour. 17. Per box price for **packing** on customer premises.

Southeast. ... a. With **case** (cloth buckram) per **volume**. Southeast. \$18.98. Each. ...

www.doa.state.nc.us/PandC/125a.htm - 48k - [Cached](#) - [Similar pages](#)

[UK Edition] - Sony CDWM Walkman Case

... noon,i got it.By the way,i have to say amazons **packing** made me ... Customers gave Sony CDWM Walkman **Case** an **average** rating of 3.5/5. ... More Information/Buy This **Item**]. ...

electronics.reviewindex.co.uk/ reviews_uk/B0000A9Z07.html - 23k - [Cached](#) - [Similar pages](#)

Features **Item** : To Circulate or Not to Circulate: That is the ...

... In no **case** should the circulation process be ... flow rates before hydraulic media **packing** occurs. ... same conditions will always require less **average** residence time ...

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Features Item : The Effect of Fine-Particle-Size Extenders and ...

... et al2, assumes that there is random **packing** between TiO2 and ... when the particle size reaches an **average** of between ... be seen however that this is not the **case**. ...

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Eagle Creek Pack-It Compressor Set

... in the butt about travel has to be **packing**. ... Item Number: EAG0032 Quantity: Items can always be ... Undercover Passport Money **Case**, Undercover Passport Money **Case** ...

www.backcountrystore.com/store/EAG0032.html?CP=CJDataFeed - 51k - [Cached](#) - [Similar pages](#)

Eagle Creek Pack-It Half Cube

... 08-18-03: Good **Item** for **Packing**. ... Item Number: EAG0008 Select Color/Size: Select options ... Undercover

Passport Money **Case**, Undercover Passport Money **Case** Price ...

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... Finally, in the **case** of reformatting, whether microfilm or ... has been done to preserve the original **item**. ... with: initial review and selection, **packing** and shipping ...

www.ifla.org/IV/ifla69/papers/030e-Pilette.pdf - [Similar pages](#)

Pallets and Packing, pg.2 - SEFCO's guide concerning packing ...

... HHG storage, proper handling means that the mover/warehouse foreman has to match up a numbered **item** from a pre-made **packing** list and ... Buy a shipping **case**... ...

www.sefco-export.com/pallets2.htm - 27k - [Cached](#) - [Similar pages](#)

Sefco's review: Packing Material and Origin Services Guide

... works of art may call for a custom made wooden **case** or crate to ... they have to allow for the couple inches of **packing** to be placed around each **item** Crating an ...

www.sefco-export.com/origin.htm - 10k - [Cached](#) - [Similar pages](#)

Section 6 - Further Collation Mode Features

... allows you to indicate that a cylindrical **item** is being ... details on all aspects of cylindrical **packing** are given ... The **case** size, number of cases per pallet, and ...

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FIIG A103 ITEM CHARACTERISTICS DATA REQUIREMENTS

... THE MEASURED WEIGHT OF AN **ITEM** UNENCUMBERED BY PACKAGING OR **PACKING** MATERIAL. ... (eg, AFJHGCARRYING **CASE***). ... THE TYPE OF STORAGE SPACE REQUIRED FOR AN **ITEM** IN ORDER ...

www.dlis.dla.mil/fiigdata/A1030/ake.htm - 43k - [Cached](#) - [Similar pages](#)

Features Item : Milling Finer Dispersions

... dispersion rate; and RTIME is the product **average** residence time ... the AP discs in a small **volume** mill ... discs, which are more sensitive to hydraulic media **packing**. ...

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Best Byte Computers

... **Average** ground shipment delay is 1.5 days. ... Our **packing** stations generate a notification email as soon as the ... must pay shipping to return the damaged **item** to us ...

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It's in There

... generate additional shipping labels at the **packing** station will ... to a reconsideration to include the **item** at all ... In the worst-**case** scenario, stuff shows up one ...

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DC Case Study of SRDC Facility Operations

... in the existing DC building in **case** of future growth ... They verify product counts against the **packing** slip and perform ... packers apply price tags to each **item** in an ...
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... but not limited to: timeliness of deliveries, quality of products, back orders; adequate **packing** lists, invoicing ... 02-133-MS c. In **case** any **item** or lots of ...
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3M Packaging: Press Releases

... the full line of 3M-Matic **case** labeling equipment ... Yet, **packing**, moving, handling and receiving packages in ... air cushion -- effectively suspending the **item** in air ...
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... cycle backs up chucks at the **packing** house level ... In this **case**, the victims are all consumers and all ... neighborhood-by-neighborhood, store-by-store, **item**-by-**item** ...
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Parcel Shipping & Distributing Editorial

... The checkout process involves re-handling each **item** to pay ... go to a final operation for inventory control and **packing**. ... If this is not the **case**, your next step ...
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[doc] FACIAL TISSUE

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... Box **packing** must be maintained as specified. ... 6.1 Bidder must submit with bid, one full **case**, indicating brand ... sworn, depose and say that for the **item**(s) listed ...
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... Getting Started Introduction Frac is a 3D **packing** (TETRIS-like) game where you just pack rectangular prisms ... This **item** appears in **case** background music ...
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BayLuna UnLimited Die-cast Collectibles - Hot Wheels, Matchbox ...

... Each **item**, in each **case**, that we open is individually ... where our experience shows that the **item** is extremely ... free shipping with the very best **packing** job that I ...
www.bayluna.com/body_die-cast.shtml - 101k - [Cached](#) - [Similar pages](#)

Glossary

... will hold 30-dozen of eggs, however, **case** sizes range ... laying house(s) to the grading and **packing** or further ... This **item** is marketed at retail or further processed ...
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AA-20102B Juice, Lemon, Concentrated, Frozen.HTM

... 1.1 This Commercial Item Description (CID) covers concentrated frozen lemon juice ... 5.1 Preservation, packaging, **packing**, labeling, and **case** marking. ...
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NetHistory

... I said that we should hang onto it just in **case** the lamp turned up ... So she does the **packing**. ... sequential order, and if it is out of sequence, the **item** is > deleted ...
nethistory.dumbentia.com/nut18.html - 28k - [Cached](#) - [Similar pages](#)

Pick area layout

... with scanning of bar codes, verifying each **item** and package ... Shipping labels and **packing** lists are printed before picking ... NOTE: In this **case**, the use of batch ...
www.elogistics101.com/Article/Pick%20Area%20Layout.htm - 19k - [Cached](#) - [Similar pages](#)

[Federal Register: April 30, 1998 (Volume 63, Number 83)]

... The HTS **item** number is provided for convenience and customs ... we deducted HM **packing** costs and added US **packing** costs ... be limited to those raised in the **case** briefs ...
ia.ita.doc.gov/frn/9804frn/a489602.htm - 13k - [Cached](#) - [Similar pages](#)

WAIS Document Retrieval

... Although the HTS **item** numbers are provided for convenience ... See Memorandum from **Case** Analyst to File, dated December 27 ... deductions from CEP for US **packing** in the ...
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 ... condensate of whey), can cooling, meat **packing** or fish ... be determined on a **case** by **case** basis. ... **Item** 4. Influent Flow Monitoring - Identify the flow monitoring ...
www.dnr.state.wi.us/org/water/wm/www/applications/muni_activity.pdf - [Similar pages](#)

Features **Item** : Get a Fine Finish for All Your Holes

... discernible through tool wear and surface patterns, the second **item** to check ... In the **case** of excessive ... or a "9." If they are that shape, yet **packing** and binding ...
www.qualitymag.com/CDA/ArticleInformation/features/BNP__Features__Item/0,6425,100351,00.html - 32k - [Cached](#) - [Similar pages](#)

[PDF] Oak Street TM – The Complete Solution Eight years ago, ISS set ...

File Format: PDF/Adobe Acrobat - [View as HTML](#)
 ... on their invoices • Customer specific **packing** list instructions ... Each vendor's prices, **item** number, lead ... order entry • Bin locations, **case** packs, product ...
www.2000accounting.com/PUBLIC/advanced.pdf - [Similar pages](#)

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 ... EDI / OTHER: _____ **PACKING** LIST REQUIRED? _____ **CASE**#
 / LOT RECORDING?: _____ **LABELS** ... **ITEM** NUMBER DESCRIPTION **CASE** SIZE (WXLX H ...
www.lewisstorage.com/lewis.pdf - [Similar pages](#)

Customer Service Policy

... purchase price, minus the shipping and handling (including cost of **packing** and supplies ... Unopened **item** return of the above needs to be handled **case** by **case** ...
www.atafa.com/servicepolicy.htm - 29k - [Cached](#) - [Similar pages](#)

MRE's, Meals Ready To Eat, Field Rations, Pouch Food, Trail Food ...

... to the regular MRE in packaging and **packing** and contains ... ULTRA HIGH TEMPERATURE MILK (UHT) This **item** is used ... The weight and cube per **case** is approximately 16.4 ...
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[PDF] 3-d **packing** of items with limited load bearing strength

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... The latter represents the worst-**case** scenario in terms ... and Gehring (2001) - assumes that an **item's** load bearing ... between feasible and infeasible **packing** options ...
www.swan.ac.uk/ebms/research/working%20papers/EBMS%202003%203.pdf - [Similar pages](#)

Van Brunt Warehouse - Request A Quotation

... of total SKU's to be **case**-picked (full **case**): ... **Packing** list per carton required. Bill of Lading required. ... Items barcoded Cases barcoded with **item** number. ...
www.vanbruntwarehouse.com/quote.html - 15k - [Cached](#) - [Similar pages](#)

Publications

... **Item** Multi-**Item** Inventory System. Operations Research, 44, pp. 580–595. ... 1997), **Average Case** Analysis of the Bin-**Packing** Problem with General Cost Structure. ...
www.iems.nwu.edu/~levi/publications.html - 16k - [Cached](#) - [Similar pages](#)

Economy - India Bilateral Treaties and Agreements - Volume 1

... upto the quantity or value mentioned against each **item**, during the ... (d) In **case** Government of ... of India) and inspection of quality of grain and **packing** shall be ...
meadev.nic.in/economy/ibta/volume1/chap48.htm - 35k - [Cached](#) - [Similar pages](#)

Inventory Application Specs

... It may be a very expensive Inventory **Item** that we capitalize ... In this **case** Lots will be used to track our production ... A key point of confusion is the **packing** area ...
gnue.org/docs/gnue_inv.html - 29k - [Cached](#) - [Similar pages](#)

[PDF] セイレイ工業株式会社

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... to 780 Sub Sub Sub Sub Body **Packing** materials Manual ... PEIDS (eg, carbon dioxide in the **case** of "Global ... only unpolished rice grains Function **item** Product model ...
www.jemai.or.jp/ecolabel/eng_ecl/e_psc_pdf/014.pdf - [Similar pages](#)

Definitions of e-marking terms

... Prepacked foodstuff, Any single **item** for presentation as such to ... consisting of a foodstuff and the **packing** into which ... or only partially, but in any **case** in such ...
www.sp.se/metrology/pack/eng/edefin.htm - 57k - [Cached](#) - [Similar pages](#)

Products

... **Case** Pack" conversions & "Solid **Case** Only" ship ... Generates customized Picking Tickets/ **Packing** Slips for warehouse ... two files (Header and Line **Item**) or in ...
www.pay-ware.com/Products.htm - 68k - [Cached](#) - [Similar pages](#)

D. Canned Sweet Potatoes

... b) Whole, in liquid **packing** media. 21. ... sizes, they may, alternately, be described as whole baby carrots or cut carrots-baby whole style, as the **case** may be. ... **Item**. ...
laws.justice.gc.ca/en/C-0.4/C.R.C.-c.291/27398.html - 78k - [Cached](#) - [Similar pages](#)

Bin-Packing Problem -- from MathWorld

... than the number obtained if the **item** is included ... Albers, S. and Mitzenmacher, M. "Average-**Case** Analyses of ... Fit and Random Fit Bin **Packing**." Random Structures ...
mathworld.wolfram.com/Bin-PackingProblem.html - [Similar pages](#)

Features **Item** : Metal Catalysts for VOC Oxidation

... A typical RTO operates with **average** outlet temperature exceeding ... a large portion of original ceramic **packing** by a ... A special **case** of VOC control application is ...
www.pollutionengineering.com/CDA/ArticleInformation/features/BNP_Features_Item/0,6649,107276,00.html - 29k - [Cached](#) - [Similar pages](#)

Publications

... Levi (1996), Single Resource Multi-**Item** Multi-**Item** Inventory System ... WT Rhee and D. Simchi-Levi (1997), **Average Case** Analysis of the Bin-**Packing** Problem with ...
slevi1.mit.edu/~levi/publications.html - 17k - [Cached](#) - [Similar pages](#)

How Fulfillment Houses and Drop Shippers Work

... In this **case**, you would still house the inventory at ... approximately 3 cents (US) per

small item, or \$15 ... the mailing label, the box, the **packing** material, and ...

www.workz.com/cgi-bin/gt/tpl_page.html,template=1&content=1025&nav1=1& - 25k - Nov 19, 2003 - [Cached](#) - [Similar pages](#)

[IDII Software Newsletter - Volume 1 Number 16 - WMS, ERP, TMS, ...](#)

... the freight is just a pass through item. ... AutoPalletP3 is a powerful **case**-picking and pallet ... for warehousing, transportation, shipping, **packing**, slotting, loading ...

www.idii.com/esn/vol1num16.htm - 32k - [Cached](#) - [Similar pages](#)

[ProTech Professional Products Inc.|| Serving Dentists ...](#)

... MONOMER ONLY, Item #, Price. ... While the **case** is very hot, apply ProTech® Separating Medium ... time the material will have reached the right consistency for **packing**. ...

www.protechdental.com/15min.html - 17k - [Cached](#) - [Similar pages](#)

[Sony MZ-S1 S2 Sports Net MD MiniDisc Player \(Electronics\)](#)

... This **item** ships FREE with Super Saver Shipping. ... can run, jog, and shake or drop the **case** without interrupting ... will last longer than a month - I sent it **packing**. ...

www.coolshopping.com/.../name/

Sony%2520MZ-S1%2520S2%2520Sports%2520Net%2520MD%2520MiniDisc%2520Player - 28k - [Cached](#) - [Similar pages](#)

[\[PDF\] Food/6000](#)

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... 9 Product Costing Weighted Moving **Average** Cost Method ... Other Food/6000 ® Modules Food **Packing** Request Production ... Order Date Ship Date **Item** Number Description ...

www.seihq.com/illustrations.pdf - [Similar pages](#)

[Delsey Luggage Volume 4-Piece Nested Luggage Set](#)

... Reviewed Yet - Be the first to review this **item**! ... three inches • Allows for additional **packing** space if ... additional security • Interior of the **case** is fully ...

www.bagsforme.com/bags/DL-13701 - 25k - [Cached](#) - [Similar pages](#)

[\[PDF\] G6L Ultra-thin Low Signal Relay Data Sheet](#)

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... the relay model number, it is not marked on the relay **case**. ... terminal G6L-1F Rated coil voltage Tape **packing** G 6 ... 230 mW **Item** Non-latching Relays G6L-1P, G6L-1F ...

oeiwcsnts1.omron.com/pdfcatalog/nsf/PDFLookupByLinkCode/DS_G6L?OpenDocument - [Similar pages](#)

[Shipping and Distribution Case Studies](#)

... International (FPI) manufactures polystyrene loosefill (**packing** peanuts) from ... **Case** Study: THARCO's 100% recycled stock box line. ... alternate Rule 41 and **Item** 222. ...

www.ciwmb.ca.gov/Packaging/CaseStudies/Workshop.htm - 41k - [Cached](#) - [Similar pages](#)

[Lands' End pockets labor savings with bagger May, 1996 page 41](#)

... tests, we saw that the paper **packing** slip had ... a lessened chance of putting the wrong **item** into a ... **Case** former-The Loveshaw Corp., Padlocker Packaging Systems Div ...

www.packagingdigest.com/articles/199605/41.html - 12k - [Cached](#) - [Similar pages](#)

[\[PDF\] Library Binding Page 1 of 7 \(3352-S\) 11/2002 SPECIFICATIONS](#)

File Format: PDF/Adobe Acrobat - [View as HTML](#)

... MATERIAL: Furnished material must be **case**-bound into ... **PACKING**: Shipping containers shall have a minimum ... S) 11/2002 The following **item** designations correspond to ...

www.easc.noaa.gov/fld/PraPub/Documents/3352sp.pdf - [Similar pages](#)

[\[PDF\] A. B. C. D. BID 07/03 - BOND PAPER SECRETARIAT FOR MEETINGS AND ...](#)

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... on approximate weight and **volume** DELIVERY PLACE: **PACKING** CHARGES: Indicate ... by the bidder, to accept any **item** in the ... In **case** of error in the extension of prices ...

www.oas.org/OASpage/bid/2003/BID0703_01eng.pdf - [Similar pages](#)

[Features **Item** : Laser Microvia Productivity: Dual Head Laser ...](#)

... Figure 3 shows the increase in **average** power at a ... In the **case** of a single pattern layout, the patented ... Laser Product Manager for the Advance **Packing** Group of ...

www.circuitree.com/CDA/ArticleInformation/features/BNP_Features_Item/0,2133,28538,00.html - 32k - [Cached](#) - [Similar pages](#)

[PDF] MF2184 Economic Analysis of a New Business-Doing it Right

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... Security Workers' Compensation Ingredients **Packing** Materials Equipment ... comparisons: per container, per **case**, and total ... This will include every **item** that will ...
www.oznet.ksu.edu/library/agec2/MF2184.PDF - [Similar pages](#)

[PDF] Company Date Section ...

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... Put-Away, Picking, Handling, **Packing**, Staging, Shipping ... Comparing Broken **Case** Storage Equipment 500 – 1,000 Low ... Hour Ease of Reconfig **Item** Security Equipment ...
www.bicinc.com/publications/warehousing101.pdf - [Similar pages](#)

NAFTA - Chapter 4 Part 2

... vehicles provided for in tariff **item** 8702.10.bb ... means the costs incurred in **packing** a good ... torque convertor type transmissions transmission **case** and convertor ...
www.sice.oas.org/trade/nafta/chap-042.asp - 29k - [Cached](#) - [Similar pages](#)

Glossary

... **Case** Pack, Quantity of items packed in a **case**. ... in a store where a different **item** is promoted ... Pack, Picking of product from inventory and **packing** into shipment ...
www.mie.utoronto.ca/labs/ilr/imLEG/glossary.htm - 83k - [Cached](#) - [Similar pages](#)

Country Profile : Market Profile

... In **case** the product is a food **item** requiring the ... Invoice; **Packing** list; Certificate of origin; Bill of lading ... In **case** of delay, demurrage charges are paid from the ...
www.paltrade.org/Paltrade/business/import2.htm - 67k - [Cached](#) - [Similar pages](#)

All Russia Web Resource for Toys, Stationary and Christmas items ...

... only by minimum quantity one cartoon of each **item**. ... In this **case** the delivery will be accomplish immediately ... 3. Cards holders can have freight **packing** free of ...
www.sig.ru/eng/usl.jhtml?kat=4 - 13k - [Cached](#) - [Similar pages](#)

Notice of Award T-1460

... be accompanied by a **packing** slip indicating ... 5.27 Carton (**Case**) Marking Requirement: all shipping ... included: Contents (industry standard **item** description) State ...
www.state.nj.us/treasury/purchase/noa/contracts/t1460.shtml - 30k - [Cached](#) - [Similar pages](#)

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Bin-Packing Problem

The problem of packing a set of items into a number of bins such that the total weight, volume, etc. does not exceed some maximum value. A simple algorithm (the first-fit algorithm) takes items in the order they come and places them in the first bin in which they fit. In 1973, J. Ullman proved that this algorithm can differ from an optimal packing by as much as 70% (Hoffman 1998, p. 171). An alternative strategy first orders the items from largest to smallest, then places them sequentially in the first bin in which they fit. In 1973, D. Johnson showed that this strategy is never suboptimal by more than 22%, and furthermore that *no* efficient bin-packing algorithm can be guaranteed to do better than 22% (Hoffman 1998, p. 172).

There exist arrangements of items such that applying the packing algorithm after *removing* an item results in *one more* bin being required than the number obtained if the item is *included* (Hoffman 1998, pp. 172-173). The first such example was constructed by Sylvia Halasz and published in Graham (1976, pp. 223 and 225, Fig. 5.46).

SEE ALSO: [Cookie-Cutter Problem](#), [Tiling Problem](#)

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